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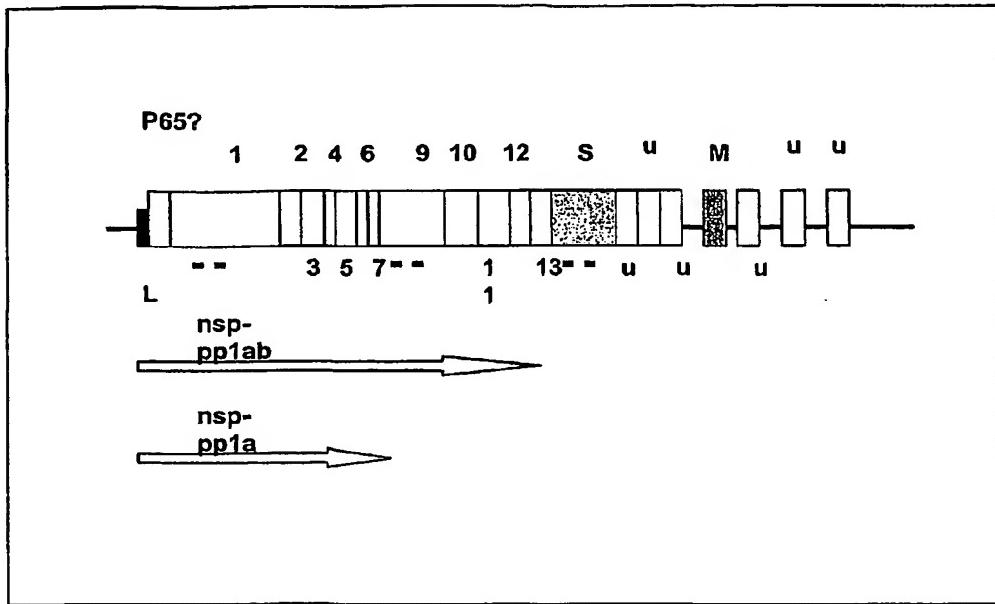
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(54) Title: RNAI AGENTS FOR ANTI-SARS CORONAVIRUS THERAPY

WO 2005/019410 A3



(57) Abstract: The present invention provides compositions and methods that are useful for the treatment of severe acute respiratory syndrome (SARS). More specifically, nucleic acid agents such as siRNA molecules and their analogues that target respiratory infections including SARS coronavirus and their methods of use are described, for clinical treatments of SARS, respiratory viral infections, for prevention and treatment of respiratory infections as needed for bio-defense, for treatment of respiratory diseases, and for discovery of therapeutic targets for respiratory diseases and infections.



GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/12730

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C12Q 1/68; C07H 21/04; A01N 43/04
US CL : 435/6; 536/24.5; 514/44

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 435/6; 536/24.5; 514/44

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	US 2003/0224353 A1 (STEIN et al) 04 December 2003 (04.12.2003), see paragraph [0073].	1-2, 11-13, 24-26
A	US 4,963,532 A (CARTER) 16 October 1990 (16.10.1990), see col. 13-14.	1-4, 11-15, 17-29
Y	DROSTEN et al. Identification of a Novel Coronavirus in Patients with Severe Acute Respiratory Syndrome. The New England Journal of Medicine. 10 April 2003 (10.04.2003)(web publication), Vol. 348, pages 1967-1976.	1-2, 4
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A	US 2002/0162126 A1 (BEACH et al) 31 October 2002 (31.10.2002) see [0007].	3, 6-7, 11-15, 17-29
Y		1-2, 4

Further documents are listed in the continuation of Box C.

See patent family annex.

• Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"B" earlier application or patent published on or after the international filing date	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&"	document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means		
"P" document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search

08 August 2005 (08.08.2005)

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/12730

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.: 5, 8-10, 16
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
Claims 5, 8-10 and 16 recite specific nucleotide sequences. However, Applicants have not provided a sequence listing in either written form or in computer readable format. Therefore, the sequences set forth in these claims cannot be efficiently searched since Applicants have not provided a sequence listing.

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No. PCT/US04/12730

Continuation of B. FIELDS SEARCHED Item 3:
CAplus, Medline, USPAT, EPO, JPO, Derwent, US PG-PUB
search terms: sars, severe acute respiratory syndrome, diagnose or diagnostic or screen or pcr or assay, dsRNA or siRNA or RNAi or antisense or ptgs.